

## Utah Weekly Pertussis Update

2016 data, through MMWR week ending November 12, 2016 (MMWR week 45)

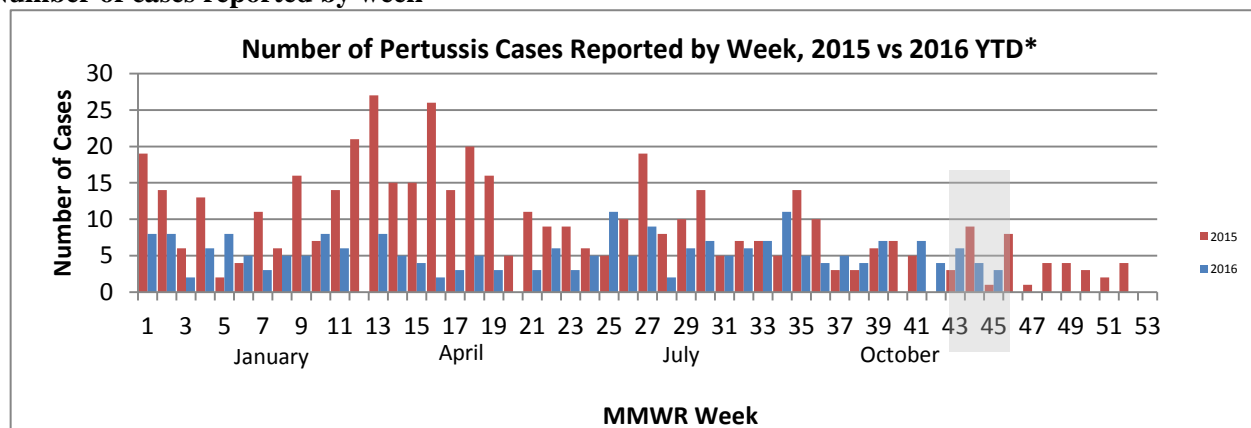
*Data presented in this report are based on current data available and will be subject to change weekly.*

### Data Summary

Total number of cases reported, 2016 year-to-date (YTD)	229	Utah Incidence rate, 2016 year-to-date (YTD) per 100,000 person-years	9.0
Total number of cases reported 2015	483	Utah Incidence rate, 2015 per 100,000 person-years	16.7
Number of cases reported in past week	3	National Incidence rate*, 2014 per 100,000 person-years.	10.4
Total number of cases reported, through same time period 2015	457	2016 Hospitalizations	13
Age groups with the highest rates	<1 year	2016 Cases in infants <1 year	19
	1-4 year		

\*National Incidence Rate is updated as released by the Centers for Disease Control and Prevention.

### Number of cases reported by week



\*Additional cases may have occurred, especially in the most recent 3 weeks that have not yet been reported, as indicated by the grayed out section of the graph above.

### 2016 Year-to-Date Incidence Rates, By Age

Age (years)	2016 Cases	2014 population	Rate*, **
<1	19	50,629	45.1
1-4	29	201,502	17.3
5-14	51	511,355	12.0
15-24	34	474,017	8.6
25-34	20	440,622	5.4
35-44	27	386,350	8.4
45-54	18	306,598	7.0
55-64	20	276,569	8.7
65+	11	295,260	4.5
Total	229	2,942,902	9.0

\* Rate is calculated per 100,000 person years.

Infants less than 1 year of age have historically had the highest incidence rates of pertussis due to their susceptibility.

### School Age Incidence Rates, 2016 Year-to-Date

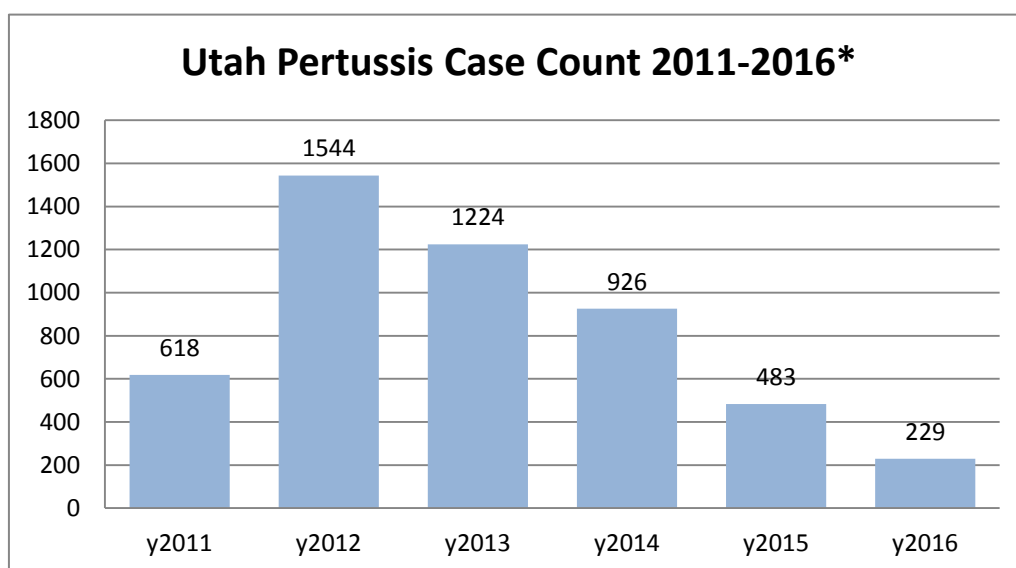
Grade	Age (years)	2016 Cases	2014 Population	Rate*
Preschool	3-4	123	101,497	145.5
Kindergarten	5	2	52,285	4.6
1	6	4	53,101	9.0
2	7	3	52,876	6.8
3	8	6	52,082	13.8
4	9	2	51,852	4.6
5	10	5	51,206	11.7
6	11	9	50,689	21.3
7	12	6	48,996	14.7
8	13	1	49,110	2.4
9	14	13	49,158	31.8
10	15	10	47,568	25.2
11	16	6	46,830	15.4
12	17	8	46,231	20.8

\* Rate is calculated per 100,000 person-years

School age incidence rates were calculated using the average age of a student in each grade.

The high incidence rates in 5th and 6th grade may be due to waining immunity.

### Utah Case Counts of Pertussis, 2011-2016\* Year to Date



Pertussis tends to be cyclical. Reports have increased in Utah since 2010, peaked in 2012, and are currently trending downward.

\* 2016 data includes pertussis cases reported year to date. 2010-2014 data reflects cases reported during the entire calendar year for each year.

## Incidence of pertussis by Local Health Department, 2016 YTD

Local Health Department	2016 Cases	Rate*
Bear River	7	4.9
Central Utah	1	1.6
Davis County	18	6.6
Salt Lake County	107	11.8
San Juan County	0	0.0
Southeast Utah	17	50.1
Southwest Utah	11	6.1
Summit County	8	24.6
Tooele County	4	7.8
TriCounty	2	4.1
Utah County	27	5.8
Wasatch County	0	0.0
Weber-Morgan	21	10.0

\* Rate is calculated per 100,000 person-years  
using 2014 Utah population estimates

